



Brandalin Barnes, left, is a nuclear technician student at Idaho State University's Energy Systems Technology and Education Center (ESTEC). Her summer internship at INL provided experience at the lab's operating nuclear facilities.

## Internships give nuclear technician students hands-on experience

By Kortny Rolston, *INL Communications & Governmental Affairs*

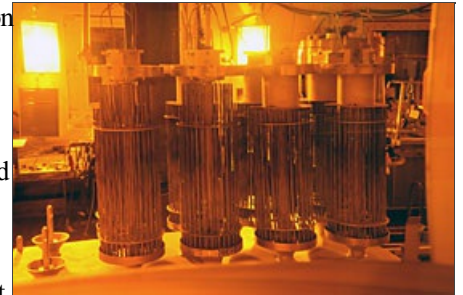
Brandalin Barnes expected to spend her 10-week internship at Idaho National Laboratory as a "go-fer" or errand girl. Instead, she is working in a control room, walking down piping systems, and monitoring temperature, pressure and other critical parameters at an INL nuclear facility.

And the second-year student at Idaho State University's Energy Systems Technology and Education Center (ESTEC) couldn't be happier.

"I had this idea that an internship would be making copies and getting coffee, not working in a hot cell and learning about system piping and components," said Barnes, who is enrolled in ESTEC's nuclear operations technician program. "It's been amazing. I work with reactor operators and attend the same training that qualifies them to operate nuclear systems."

Barnes is one of a handful of ESTEC nuclear technician students interning at INL this summer. Some, like Barnes, work primarily at INL's Materials and Fuels Complex while others are based at the lab's Advanced Test Reactor.

Barnes and her classmates are the first wave of students to enroll in the year-old ESTEC nuclear operations technician program, which INL helped launch in 2011.



**Barnes worked at the Materials & Fuels Complex's Fuel Conditioning Facility, which contains this large hot cell to protect employees working with highly-radioactive materials.**



**Barnes and fellow intern Evelyn Hoover pose outside the Materials & Fuels Complex's Fuel Conditioning Facility.**

Richard Holman, INL's workforce initiatives manager, said the goal is to give the students real experience in nuclear systems and operations.

"There is a tremendous shortage of experienced nuclear technicians in this country," he said. "Anything we can do to help these students get experience is important to the safety and security of current and new nuclear plants."

Vince Bowen, a nuclear facilities manager at INL and an ESTEC instructor, agrees.

Students learn theory in the classroom, but the knowledge that Barnes and other ESTEC students gain in the field is invaluable, he said.

"When we talk about a bank of high-efficiency filters in class, it doesn't mean much," said Bowen, who is mentoring Barnes and other ESTEC interns this summer. "But when they see it in person and physically put their hands on it, it gives them context. It starts to make sense."

The hands-on work excites Barnes. She said it gives her the opportunity to apply what she's learned in class.

"You don't get an idea of the scope or how complex these systems are until you see them and physically touch them," Barnes said.

Holman hopes to increase the number of nuclear operations students interning at INL in the future.

"It benefits everyone. The students gain experience and are exposed to INL and its mission," he said. "We are facing the same shortage everyone else is. If we educate, train and hire them locally, it will help fill the needs we have at INL with highly trained operators that want to stay in eastern Idaho."

### Did You Know?

Idaho National Laboratory partnered with Idaho State University and Partners for Prosperity, a nonprofit organization, in 2006 to create the Energy Systems Technology and Education Center (ESTEC) at ISU's main campus in Pocatello, Idaho.

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